

Amendments To The Drawings

The attached drawing sheets are requested to replace the original sheets of
FIGS. 1-2.

Attachment: Replacement Sheet(s) of FIGS. 1-2

Amendments To The Claims

The listing of claims presented below will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1. (Currently amended) A low-temperature and low-pressure nuclear power plant (NPP) spent fuel reactor, wherein the reactor core comprising:
 - a plurality of NPP spent-reactor-fuel assemblies;
 - upper and lower core grid plates;
 - a plurality of control ~~rod~~ rods and corresponding drive mechanisms; ~~said~~
~~control rods extending through said upper and lower core grid plates;~~
 - the ~~NPP spent reactor~~ fuel assemblies being located between said upper and lower core grid plates;
 - each of the control rods being inserted from the top of the reactor core into a lattice formed of the upper and lower core grid plates and fuel assemblies; ~~and between said NPP spent reactor fuel assemblies;~~
 - the upper end of each control rod being connected with its corresponding drive mechanism;
 - the reactor core being located in a core vessel located under a core pool, said core pool being provided with coolant inlet and outlet nozzles, which are connected through pipes with a heat exchanger and which forms a cooling circuit for the reactor;
 - wherein NPP spent ~~reactor~~ fuel is directly used as nuclear fuel ~~and wherein light water is used as coolant and moderator in the reactor~~
 - and wherein on a side of the core pool there is provided an underwater handling canal for connecting the core pool with a spent fuel storage pond, which

canal is plugged with a sealing plug when the reactor is in operation to ensure isolation of the core pool from the storage pond, and which canal is opened in case of handling to transport the spent fuel assemblies from the core pool into the storage pond.

2. (Currently amended) The low-temperature and low-pressure NPP spent fuel reactor according to claim 1, wherein on the top of the core pool there is provided at least one of: a sealing cover and an airtight gas shield.
3. (Currently amended) The low-temperature and low-pressure NPP spent fuel reactor according to claim 1, wherein a pressurizer or a large pool is connected with the coolant inlet nozzle to ~~improve~~ control static pressure and maintain pressure at the core outlet.
4. (Cancelled)
5. (Currently amended) The low-temperature and low-pressure NPP spent fuel reactor according to claim 1, wherein further including a residual heat a cooler is provided removal system in the spent fuel storage pond and an electromagnetic valve is arranged on the connection tube to form a passive residual heat removal system.